# Waste Management and Radiation Control Board Meeting Utah Department of Environmental Quality 195 North 1950 West (Conference Room #1015) SLC, Utah December 10, 2015

December 10, 2015 1:30 p.m.

**Board Members Present:** Richard Codell, Danielle Endres, Marc Franc, Jeremy Hawk, Steve McIff,

Shawn Milne, Brett Mickelson, Dennis Riding (Vice Chair), Vern Rogers,

Shane Whitney and Dwayne Woolley (Chair)

**Board Members Absent:** Alan Matheson

**Staff Members Present:** Scott Anderson, Brent Everett, Scott Baird, Tom Ball, Ralph Bohn, Eric Boone,

Ed Costomiris, Arlene Lovato, Rusty Lundberg, Rick Page, Jerry Rogers,

Elisa Smith, Don Verbica, Otis Willoughby and Raymond Wixom

Others Present: Les Ashwood, Tim Orton, Chantel Pelk, Bret Rogers, Ashley Soltysiak,

Sonja Wallace

## I. Call to Order.

Dwayne Woolley (Chair) welcomed all in attendance and called the meeting to order at 1:35 p.m. Alan Matheson was excused from the meeting.

## II. Introductions of new Board Members.

The three board members who were not in attendance at the last meeting introduced themselves and their position on the Board.

Shawn Milne, a small business owner, is a Tooele County Commissioner and is one of two non-federal government representatives on the Board. Jeremy Hawk, Radiation Safety Officer for IHC, represents the field of radiation safety. Danielle Endres, Professor at the University of Utah (Communication Department) fills the position on the Board designated for a nongovernmental organization that represents community interests and does not represent industry interests.

## III. Approval of the meeting minutes for the November 12, 2015 Board meeting.

It was moved by Dennis Riding and seconded by Marc Franc and UNANIMOUSLY CARRIED to approve the November 12, 2015 Board Meeting minutes.

## IV. Underground Storage Tanks Update.

Brent Everett, Director of the Division of Environmental Response and Remediation (DERR), explained DERR's responsibility for the Underground Storage Tank (UST) and Meth Lab Decontamination Specialist programs. Periodically, rules for these programs will come before the Board for approval. Mr. Everett will also report on the status of the Petroleum Storage Tank (PST) Trust Fund.

The cash balance of the PST Trust Fund at the end of October 2015 was \$16,190,526.00. The preliminary estimate for the cash balance of the PST Trust Fund for the end of November 2015 is \$16,697,672.00. The cash balance of the PST Trust Fund experiences fluctuations due to the incoming revenue stream and the claims that are paid.

Dennis Riding asked if facility owners are taking advantage of the rebate program. Mr. Everett said that he has not seen significant activity regarding the rebate program but anticipates rebate requests to come in through the end of the year. Mr. Everett will look into the rebate program and report to the board when more information is available.

Mr. Everett reported that he is not aware of any upcoming legislation for the 2016 legislative session.

#### V. Administrative Rules.

a. Approval to proceed with formal rulemaking and 30-day public comment period for proposed changes to Radiation Control Rules, R313-15, R313-19, R313-22, and R313-24 (Board Action Item).

Rusty Lundberg, Deputy Director, reviewed the proposed changes to R313-15, Standards for Protection Against Radiation, R313-19, Requirements of General Applicability to Licensing of Radioactive Material, R313-22, Specific Licenses, and R313-24, Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements. These changes incorporate the federal decommissioning planning regulations promulgated by the Nuclear Regulatory Commission (NRC) on June 17, 2011 (76 FR 35512).

On June 17, 2011, the NRC adopted changes to 10 CFR Parts 20, 30 and 40. These regulations were adopted to improve decommissioning planning and thereby reduce the likelihood that any current operating facility will become a legacy site. The amended regulations require licensees to conduct their operations to minimize the introduction of residual radioactivity into the site, which includes the site's subsurface soil and groundwater. Licensees also may be required to perform site surveys to determine whether residual radioactivity is present in subsurface areas and to keep records of these surveys with records important for decommissioning. The amended regulations require licensees to report additional details in their decommissioning cost estimates, eliminate the escrow account and line of credit as approved financial assurance mechanisms and modify other financial assurance requirements.

Mr. Lundberg further explained these changes to the Utah rules are required to maintain compatibility with the NRC rules and to maintain the status as an Agreement State. The NRC delegates and authorizes states to be the regulatory jurisdictional authority for the radiation control programs with that state. Utah is an Agreement State for radioactive materials including the disposal of low level radioactive waste as well as uranium mill recovery operations. Therefore, the State of Utah is required to update its rules as the NRC promulgates federal rules.

The proposed rules were not made effective at the Federal level until December 2012. An Agreement State has three years from the date of effective to adopt the rule(s) that NRC has promulgated.

The Board is authorized under Subsection 19-3-104(4)(b) of the Utah Code Annotated to make rules to meet the requirements of federal law and maintain primacy from the federal government. The draft rule has also met all of the Department of Environmental Quality rulemaking procedures.

The Director recommends that the Board approve the rule for publication in the Utah State Bulletin and commencement of a 30-day public comment period. Board action is required to publish the draft rule in the Utah State Bulletin and start a 30-day public comment period.

Dwayne Woolley asked for the dates of the comment period. Mr. Lundberg stated the proposed changes will be filed and published in the January 1, 2015 issue of the Utah State Bulletin and comments will be received until February 1, 2015 (30-day public comment period). Mr. Woolley asked if there were any changes in the proposed rules that weaken the Division's ability to govern radiation issues. Mr. Lundberg stated no and explained that if these proposed changes are not adopted, the NRC would evaluate the State of Utah as not compatible with the federal requirements. As the NRC promulgates regulations, it looks at each

component of the regulation and identifies the compatibility level of that particular requirement. The proposed changes presented today are required to maintain the compatibility level as an Agreement State and to ensure that state rules are consistent with the federal rules. The proposed changes do not differ from what the NRC has proposed.

It was moved by Steve McIff and seconded by Dr. Richard Codell and UNANIMOUSLY CARRIED to approve formal rulemaking and a 30-day public comment period for proposed changes to Radiation Control Rules, R313-15, R313-19, R313-22, and R313-24.

## VI. Low Level Radioactive Waste.

a. EnergySolutions, LLC request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive Cemented Uranium Extraction Process Residues for disposal (Board Action Item).

Otis Willoughby, Environmental Scientist, Low-Level Radioactive Waste Section provided a power point presentation as background for this variance request (macro vaults and generator encapsulation process). A copy of the presentation is provided in the meeting minutes.

On November 4, 2015, EnergySolutions submitted a request to the Director of the Division of Waste Management and Radiation Control for a one-time site-specific treatment variance from the Utah Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive Cemented Uranium Extraction Process Residues for disposal. The Mixed Waste Facility proposes to receive up to 600 cubic feet of cemented monoliths containing enriched uranium residuals. This material retains hazardous waste codes for barium, cadmium, chromium, lead and spent solvents. The generator has encapsulated the waste in concrete for security reasons. EnergySolutions proposes to receive this waste for macroencapsulation in the Mixed Waste Landfill Cell rather than chemical stabilization, as required.

This request is based on the fact that the waste has already been encapsulated in concrete at the generator's site. Treating this waste by the required method would mean grinding the waste and potentially exposing workers to unnecessary contamination. The proposed treatment will further encapsulate the waste and protect it from contact with precipitation, thereby decreasing the potential of leaching. If approved, this variance will be in effect for one year.

A notice for public comment was published in the Salt Lake Tribune, the Deseret News and the Tooele County Transcript Bulletin. The comment period began on November 10, 2015 and ended on December 9, 2015. No comments were received. This is an action item before the Board.

The Director recommends approval of this variance request based on the following findings: the proposed alternative treatment method meets the regulatory basis for a variance; the alternative treatment will be as safe to human health and the environment as the required method and the required method would create additional waste and waste handling that could possibly expose workers to unnecessary contact with the waste.

Mr. Willoughby informed the Board that additional information was provided in the Board packet regarding Dr. Codell's questions raised during the last Board meeting concerning uranium content. Also enclosed is the NRC letter and the Post-Disposal Criticality Research document.

Bret Rogers, Senior VP, Technical Services for EnergySolutions, spoke to his responsibilities of assisting generators in dealing with waste acceptance criteria and ensuring the waste being received is compliant with EnergySolutions license, prior to acceptance of the waste at the facility. Mr. Rogers reviewed the information provided in the Board packet including U-234 concentration limits.

Dr. Codell noted that the information he reviewed indicates a surprisingly large amount of highly enriched uranium that has not been recovered. Mr. Rogers explained that this waste stream comes from a uranium extraction process and is some of the by-product material that cannot be recovered and is placed in the smaller cans. The waste stream meets the concentration base limits of 1,190 pCi/g in EnergySolutions' license. Dr. Codell felt this was not a radiation concern, but more of a national security concern.

Dennis Riding asked about the construction of the cell where the treatment would take place. Mr. Willoughby explained that the mixed waste cell is constructed with three feet of clay and three synthetic liners. Soil protection is added to keep the synthetic liners from being damaged. Leak detection and leachate collection systems are also required.

Dwayne Woolley asked why the DOE cannot stabilize the waste at its site as required, rather than having the waste stream shipped in concrete and dealing with the other issues associated with it. Mr. Rogers explained the DOE is not permitted under RCRA to treat waste at its facilities.

Danielle Endres asked if the waste being received is in compliance with NRC requirements. Mr. Rogers explained that EnergySolutions received an exemption from the NRC in 1999 that allows receipt of waste containing Special Nuclear Material (SNM). The NRC has evaluated the process EnergySolutions uses to treat the SNM and has identified specific requirements EnergySolutions must adhere to, which have been incorporated into EnergySolutions' license.

It was moved by Dennis Riding and seconded by Brett Mickelson and UNANIMOUSLY CARRIED to approve EnergySolutions, LLC request for a site-specific treatment variance from the Hazardous Waste Management Rules to receive Cemented Uranium Extraction Process Residues for disposal. (Vern Rogers abstained from voting on this matter.)

## VII. Director's Report.

Scott Anderson provided the Director's Report. The intent of this report is to provide a general update on other program activities in the Division. This report reflects activities that have occurred within the past three months. This report will be given on an as needed basis; more detailed program activities will be presented during upcoming Board meetings. This report does not include inspections conducted at the large commercial facilities, inspections associated with radioactive materials program and inspections associated with the Uranium Mill program.

Mr. Anderson reported that the Division staff has completed approximately 80 compliance enforcement inspections. These inspections are done to determine compliance. The Environmental Protection Agency (EPA) mandates how many inspections the Division is required to complete each year. Enforcement actions are issued and penalties collected as appropriate.

Division staff conducted 27 compliance assistance visits. Compliance assistance visits are not enforcement inspections. These are visits designed to help small businesses understand and comply with the hazardous waste rules.

Mr. Anderson gave a brief update on the three permits that have been issued. A permit for a mobile explosive destruction system (EDS) has been issued for the destruction of non-stockpile chemical munitions at Tooele Army Depot. These are buried chemical munitions or munitions that were not part of the original chemical stockpile and need to be dismantled and the explosive component thermally treated. Two new used oil permits have been issued, one to Emerald Oil for processing and transferring of used oil and one to Renegade Oil for the transferring of used oil.

Mr. Anderson gave a brief update on the Corrective Action Program. This program deals with cleanup of contaminated "legacy" sites. These sites require an assessment of the nature and extent of contamination

and selection of a cleanup/risk mitigation remedy depending on the future land use at the site. These sites include military installations and can encompass huge areas of land where waste was treated and disposed. These sites are long-term projects and do not include an inspection or permitting component. Corrective actions are currently underway at the Tooele Army Depot, Western Zirconium and the ATK Bacchus facility.

Mr. Anderson gave a brief update on closure activities. Closure activities include solid and hazardous waste management units that have ceased operation. Two hazardous waste storage buildings have been closed at the ATK Promontory facility. This facility also has numerous solid waste management units (SWMUs) where waste was managed in the past. To date, 64 SWMUs have been remediated to the point where they can receive a No Further Action designation, which means reuse of the site is unrestricted.

Mr. Anderson gave a brief update on the Division's X-ray Inspection Program. The X-ray inspectors have inspected approximately 380 tubes at 157 facilities. The X-ray Program has two full-time employees and is a very robust program as these two employees are constantly out inspecting facilities. During a future meeting, a more detailed program overview will be provided to the Board.

Mr. Anderson reviewed the Recycling/Outreach Program. This is an extremely effective program in providing information to public associations, trade groups, high schools and any other interested organizations regarding the recycling of used oil, used tires or other materials. Tom Ball, Environmental Engineer, has conducted these recent outreach presentations with approximately 200 participants attending the presentations in the last three months.

Mr. Anderson informed the Board that he is not aware of any specific upcoming legislation for the 2016 legislative session. However, the Division has been working on various issues that could result in potential legislation. A more detailed report on potential legislation will be provided in a future meeting.

## VIII. Other Business.

## a. Introduction of HEAL – Ashley Ann Soltysiak

Ashley Ann Soltysiak gave a brief presentation to the Board regarding HEAL Utah. HEAL Utah is a local non-profit organization, representing approximately 15,000 individuals throughout the state. HEAL works on a number of issues that will frequently come before the Board. Specifically, HEAL will weigh in on nuclear waste matters, e.g. EnergySolution's current request to accept depleted uranium. HEAL also works on hazardous waste issues, such as the coal ash matter in Sunnyside, Utah. Ms. Soltysiak plans to reach out to each Board member to set up a one-on-one meeting to talk more in-depth on current issues.

# b. Board Training, Renette Anderson, Planning/Leadership Training, DEQ

Renette Anderson, Environmental Planning Consultant for DEQ, is responsible for leadership development in DEQ and for providing resources to the Boards at DEQ. Ms. Anderson stated that an important part of the Board's job includes stakeholder involvement, which is critical to effective public policymaking. Ms. Anderson noted that special interest groups want the Board to understand and consider their perspective and may add information that is "critical to the outcome".

Stakeholders may also purposefully divert attention to the "emotional" in an attempt to delay or "kill" an issue. The Board's challenge is to objectively listen and weigh information in making decisions. Each Board member's vote needs to be based on facts and within the parameters of the rules and regulations that define DEQ's work. Each decision of the Board needs to be legally defensible. These decisions can be hard, as there are times when personal opinion and the emotion of the community do not "fit" within this framework. To assist the Board in this regard, the following was suggested:

- 1. Be Proactive: Understand your constituency by reaching out to key stakeholders in the regulated, environmental and public health communities.
- 2. Be Honest: Your respect contributes to the Board's effectiveness. Avoid skirting conflict by telling people what they want to hear or hinting at more than you are able to deliver. The impact is only temporary and can be more costly in the long run.
- 3. Listen Empathetically: At the most basic level, everyone wants the same thing: to be heard AND understood. Empathy implies respect. Agreement or disagreement is separate.
- 4. Listen objectively and hear all potentially interested perspectives. Because you are in a position of influence, you should also be conscious about how your behavior may cause possible perceptions of bias.
- 5. Use Good Judgment: The loudest and/or the most visible may not be the most representative. Sometimes you just have to make the hard decision. Also available for the Board's assistance in this matter are 10 Tips for Effective Communication and Tips for Handling Conflict that were included in Board Members' Handbook.

Renette is available for more specific coaching on communication skills and working with stakeholder groups. She can be reached at renetteanderson@utah.gov or at (801) 536-4478.

Donna Spangler, Communications Director for DEQ, informed the Board members that if they are approached by a reporter/news media, each Board member is representing themselves, not the Board. A Board member speaks for the Board only when authorized by the Board to do so. This Board is likely to deal with controversial issues and reporters tend to cover those meetings when those issues arise.

Donna is available for more detailed coaching/training on working with the media. She can be reached at dspangler@utah.gov or at (801) 536-4484.

## c. Next Board Meeting

The next Board meeting has been scheduled for January 14, 2016.

## IX. Adjourn.

The meeting adjourned at 2:20 p.m.